

ORDER FOR SUPPLIES OR SERVICES										PAGE 1 OF 24	
1. CONTRACT PURCH ORDER/AGREEMENT NO. W56HZV-04-P-0296			2. DELIVERY ORDER/CALL NO.		3. DATE OF ORDER/CALL (YYYYMMDD) 2004JAN12		4. REQUISITION/PURCH REQUEST NO. SEE SCHEDULE		5. PRIORITY DOA4		
6. ISSUED BY TACOM WARREN BLDG 231 AMSTA-AQ-ATAD FLOYD DAOUST (586)574-5202 WARREN, MICHIGAN 48397-5000 EMAIL: DAOUSTF@TACOM.ARMY.MIL HTTP://CONTRACTING.TACOM.ARMY.MIL			CODE W56HZV		7. ADMINISTERED BY (If other than 6) DCMA DETROIT U.S. ARMY TANK & AUTOMOTIVE COMMAND (TACOM) ATTN: DCMAE-GJD WARREN, MI 48397-5000 SCD: B PAS: NONE ADP PT: HQ0337			CODE S2305A		8. DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER (See Schedule if other)	
9. CONTRACTOR MACOMB SHEET METAL, INC. 35195 FORTON CT. CLINTON TOWNSHIP, MI. 48035-3132 NAME AND ADDRESS TYPE BUSINESS: Other Small Business Performing in U.S.			CODE 1W810		FACILITY		10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE			11. X IF BUSINESS IS <input checked="" type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMAN-OWNED	
14. SHIP TO SEE SCHEDULE			CODE		15. PAYMENT WILL BE MADE BY DFAS - COLUMBUS CENTER DFAS-CO/NORTH ENTITLEMENT OPERATION P.O. BOX 182266 COLUMBUS OH 43218-2266			CODE HQ0337		MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2	
16. TYPE OF ORDER		DELIVERY/ CALL		THIS DELIVERY ORDER IS ISSUED ON ANOTHER GOVERNMENT AGENCY OR IN ACCORDANCE WITH AND SUBJECT TO TERMS AND CONDITIONS OF ABOVE NUMBERED CONTRACT.							
PURCHASE		X		Reference your <input type="checkbox"/> Oral <input checked="" type="checkbox"/> Written Quotation DAAE0703QS261, Dated 2003NOV11. MICHAEL OPATIK furnish the following on terms specified herein.							
ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.											
<div style="display: flex; justify-content: space-between;"> <div>NAME OF CONTRACTOR</div> <div>SIGNATURE</div> <div>TYPED NAME AND TITLE</div> <div>DATE SIGNED (YYYYMMDD)</div> </div> <div style="margin-top: 10px;"> <input checked="" type="checkbox"/> If this box is marked, supplier must sign Acceptance and return the following number of copies: </div>											
17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE SEE SCHEDULE											
18. ITEM NO.		19. SCHEDULE OF SUPPLIES/SERVICE				20. QUANTITY ORDERED/ ACCEPTED*		21. UNIT	22. UNIT PRICE		23. AMOUNT
		SEE SCHEDULE CONTRACT TYPE: Firm-Fixed-Price KIND OF CONTRACT: Supply Contracts and Priced Orders									
* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.					24. UNITED STATES OF AMERICA PAMELA L. GROZDON /SIGNED/ GROZDONP@TACOM.ARMY.MIL (586)574-8552 BY: CONTRACTING/ORDERING OFFICER					25. TOTAL \$4,284.00	
27a. QUANTITY IN COLUMN 20 HAS BEEN <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO CONTRACT EXCEPT AS NOTED											
b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE						c. DATE (YYYYMMDD)		d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE			
e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE						28. SHIP. NO.		29. D.O. VOUCHER NO.		30. INITIALS	
f. TELEPHONE NUMBER		g. E-MAIL ADDRESS				31. PAYMENT <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		32. PAID BY		33. AMOUNT VERIFIED CORRECT FOR	
36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.						31. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL				34. CHECK NUMBER	
a. DATE (YYYYMMDD)		b. SIGNATURE AND TITLE OF CERTIFYING OFFICER								35. BILL OF LADING NO.	
37. RECEIVED AT		38. RECEIVED BY (Print)		39. DATE RECEIVED (YYYYMMDD)		40. TOTAL CONTAINERS		41. S/R ACCOUNT NUMBER		42. S/R VOUCHER NO.	

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SUPPLEMENTAL INFORMATION

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
1	TACOM	DISCLOSURE OF UNIT PRICE INFORMATION	DEC/2002
<p>This constitutes notification pursuant to Executive Order 12600, Pre-Disclosure Notification Procedures for Confidential Commercial Information (June 23, 1987), of our intention to release unit prices in response to any request under the Freedom of Information Act, 5 USC 552. Unit price is defined as the contract price per unit or item purchased. We consider any objection to be waived unless the contracting officer is notified of your objection to such posting prior to submission of initial proposals.</p>			
[End of Notice]			
2	52.204-4016 (TACOM)	TACOM-WARREN ELECTRONIC CONTRACTING	JUL/2003
<p>(a) TACOM is now operating in an electronic contracting environment. All TACOM solicitations and awards are now distributed on the TACOM Warren Business Opportunities web page (http://contracting.tacom.army.mil/opportunity.htm) and are no longer available in hard copy. The TDPs and other documents, when available electronically, will be an attachment or linked to the solicitation package on the web. Please see submission guidelines at http://contracting.tacom.army.mil/userguide.htm and http://contracting.tacom.army.mil/ebidnotice.htm for more information. Any requirements included in the solicitation take precedence over guidance found on the TACOM contracting web page.</p>			
<p>(b) You may need to use special software to view documents that we post on the home page. This viewing software is freeware, available for download at no cost from commercial web sites like Microsoft and Adobe. In cases where such software is required, we provide a link from our page to the commercial site where the software is available. Once you arrive at the software developer's site, follow their instructions to download the free viewer. You then can return to the TACOM home page.</p>			
<p>(c) You are required to submit your offer, bid, or quote electronically. See the provision entitled "Electronic Offers (or 'Quotes' or 'Bids') Required in Response to This Solicitation (or 'Request for Quotations')" for more specific information.</p>			
<p>(d) Any award issued as a result of this solicitation will be distributed electronically. Awards posted on the TACOM Warren Business Opportunities web page represent complete OFFICIAL copies of contract awards and will include the awarded unit price. This is the notice required by Executive Order 12600 (June 23, 1987) of our intention to release unit prices in response to any request under the Freedom of Information Act (FOIA), 5 USC 552. Unit price is defined as the contract price per unit or item purchased as it appears in Section B of the contract and is NOT referring to nor does it include Cost or Pricing data/information. If you object to such release, and you intend on submitting an offer, notify the PCO in writing prior to the closing date identified in this solicitation and include the rationale for your objection consistent with the provisions of FOIA. A release determination will be made based on rationale given.</p>			
<p>(e) If you have questions or need help in using the Acquisition Center Home Page, call our Electronic Contracting Help Desk at (586) 574-7059, or send an email message to: acqcenweb@tacom.army.mil</p>			
<p>(f) If you have questions about the content of any specific item posted on our home page, please call the buyer or point of contact listed for the item. Additional help is available to small businesses from Government-funded Electronic Commerce Regional Centers (ECRCs) to implement EDI. Information on ECRC is available at http://www.ecrc.ctc.com</p>			

[End of Clause]

AMENDMENT 0001

1. This is Amendment 0001.
2. This Amendment 0001 extends the closing date to 20 Oct 03 at 1:00 PM.

*** END OF NARRATIVE A 001 ***

AMENDMENT 0002

1. This is Amendment 0002.
2. The closing date is hereby extended to 17 Nov 03 at 1:00 PM.
3. All other terms and conditions remain unchanged and in full force and effect.

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*** END OF NARRATIVE A 002 ***

Name of Offeror or Contractor: MACOMB SHEET METAL, INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	SUPPLIES OR SERVICES AND PRICES/COSTS				
0001	NSN: 2510-01-419-4374 FSCM: 19207 PART NR: 12450180 SECURITY CLASS: Unclassified				
0001AA	PRODUCTION QUANTITY NOUN: FRAME,STRUCTURAL,VE PRON: EH386636EH PRON AMD: 01 ACRN: AA AMS CD: 070011 <u>Description/Specs./Work Statement</u> TOP DRAWING NR: TDP 12450180 DATE: 01-MAY-2003 <u>Packaging and Marking</u> PACKAGING/PACKING/SPECIFICATIONS: SEE PACKAGING RQMTS SHEET IN TECH DATA UNIT PACK: 1 LEVEL PRESERVATION: Commercial LEVEL PACKING: Commercial <u>Inspection and Acceptance</u> INSPECTION: Origin ACCEPTANCE: Origin <u>Deliveries or Performance</u> DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 W56HZV30862416 W25G1U J 2 DEL REL CD QUANTITY DAYS AFTER AWARD 001 14 0120 FOB POINT: Destination SHIP TO: FREIGHT ADDRESS (W25G1U) XU TRANSPORTATION OFFICER DDSP NEW CUMBERLAND FACILITY BUILDING MISSION DOOR 113 134 NEW CUMBERLAND PA 17070-5001 <u>CONTRACT/DELIVERY ORDER NUMBER</u> W56HZV-04-P-0296/0000 DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 002 W56HZV30862417 W62G2T J 2 DEL REL CD QUANTITY DAYS AFTER AWARD 001 14 0120	28	EA	\$ 153.00000	\$ 4,284.00

Name of Offeror or Contractor: MACOMB SHEET METAL, INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	<div>FOB POINT: Destination</div> <div>SHIP TO: <u>FREIGHT ADDRESS</u> (W62G2T) XU DEF DIST DEPOT SAN JOAQUIN 25600 S CHRISMAN ROAD REC WHSE 10 PH 209 839 4307 TRACY CA 95376-5000</div> <div><u>CONTRACT/DELIVERY ORDER NUMBER</u> W56HZV-04-P-0296/0000</div>				

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Name of Offeror or Contractor: MACOMB SHEET METAL, INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	FSCM: 19207 PART NR: 12450180 SECURITY CLASS: Unclassified				
0002AA	<p data-bbox="264 493 435 514"><u>Option Quantity</u></p> <p data-bbox="264 573 568 594">NOUN: FRAME, STRUCTURAL, VE</p> <p data-bbox="264 653 755 804">The quantity stated for the option CLIN DOES NOT Form a part of the basic contractual quantity. Part or all of it may, however, be added to the contract by exercise of the option clause, at the discretion of the Government.</p> <p data-bbox="264 863 763 911">NOTE: Option quantity shall remain valid for 365 days after date of award.</p> <p data-bbox="446 945 698 966">(End of narrative B001)</p> <p data-bbox="264 1050 633 1123"><u>Description/Specs./Work Statement</u> TOP DRAWING NR: TDP 12450180 DATE: 01-MAY-2003</p> <p data-bbox="264 1182 747 1333"><u>Packaging and Marking</u> PACKAGING/PACKING/SPECIFICATIONS: SEE PACKAGING RQMTS SHEET IN TECH DATA UNIT PACK: 1 LEVEL PRESERVATION: Commercial LEVEL PACKING: Commercial</p> <p data-bbox="264 1392 722 1440"><u>Inspection and Acceptance</u> INSPECTION: Origin ACCEPTANCE: Origin</p> <p data-bbox="264 1499 844 1650"><u>Deliveries or Performance</u> DOC SUPPL REL CD MILSTRIP ADDR SIG CD MARK FOR TP CD 001 DEL REL CD QUANTITY DEL DATE 001 28 UNDEFINITIZED</p> <p data-bbox="264 1709 511 1730">FOB POINT: Destination</p> <p data-bbox="264 1766 779 1917">SHIP TO: <u>PARCEL POST ADDRESS</u> (Y00000) SHIPPING INSTRUCTIONS FOR CONSIGNEE (SHIP-TO) WILL BE FURNISHED PRIOR TO THE SCHEDULED DELIVERY DATE FOR ITEMS REQUIRED UNDER THIS REQUISITION.</p>	28	EA	\$ 148.35000	\$ 4,153.80

Name of Offeror or Contractor: MACOMB SHEET METAL, INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	<div>CONTRACT/DELIVERY ORDER NUMBER</div> <div>W56HZV-04-P-0296/0000</div>				

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Name of Offeror or Contractor: MACOMB SHEET METAL, INC.

CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ <u>ITEM</u>	OBLG <u>ACRN</u>	<u>STAT</u>					JOB <u>ORDER</u>	<u>ACCOUNTING</u>	<u>OBLIGATED</u>
	<u>MIPR</u>			<u>ACCOUNTING CLASSIFICATION</u>				<u>NUMBER</u>	<u>STATION</u>	<u>AMOUNT</u>
0001AA	EH386636EH	AA	2	97	X4930AC6D	6D	26FB S20113		W56HZV \$	4,284.00
	070011									
									TOTAL \$	4,284.00

SERVICE						ACCOUNTING	OBLIGATED
<u>NAME</u>	<u>TOTAL BY ACRN</u>	<u>ACCOUNTING CLASSIFICATION</u>				<u>STATION</u>	<u>AMOUNT</u>
Army	AA	97	X4930AC6D	6D	26FB S20113	W56HZV	\$ 4,284.00
						TOTAL	\$ 4,284.00

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CONTRACT CLAUSES

3	52.211-5	MATERIAL REQUIREMENTS	AUG/2000
4	52.211-17	DELIVERY OF EXCESS QUANTITIES	SEP/1989
5	52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB/1999
6	52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JUN/2003
7	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER--CENTRAL CONTRACTOR REGISTRATION	OCT/2003
8	52.246-2	INSPECTION OF SUPPLIES--FIXED PRICE	AUG/1996
9	252.211-7005	SUBSTITUTIONS FOR MILITARY OR FEDERAL SPECIFICATIONS AND STANDARDS	FEB/2003
10	252.225-7001	BUY AMERICAN ACT AND BALANCE OF PAYMENTS PROGRAM	APR/2003
11	252.225-7016	RESTRICTION ON ACQUISITION OF BALL AND ROLLER BEARINGS (Alternate I dated Dec 2000)	DEC/2000
12	52.209-1	QUALIFICATION REQUIREMENTS	FEB/1995

(a) Definition: Qualification requirement, as used in this clause, means a Government requirement for testing or other quality assurance demonstration that must be completed before award.

(b) One or more qualification requirements apply to the supplies or services covered by this contract. For those supplies or services requiring qualification, whether the covered product or service is an end item under this contract or simply a component of an end item, the product, manufacturer, or source must have demonstrated that it meets the standards prescribed for qualification before award of this contract. The product, manufacturer, or source must be qualified at the time of award whether or not the name of the product, manufacturer, or source is actually included on a qualified products list, qualified manufacturers list, or qualified bidders list. Offerors should contact the agency activity designated below to obtain all requirements that they or their products or services, or their subcontractors or their products or services, must satisfy to become qualified and to arrange for an opportunity to demonstrate their abilities to meet the standards specified for qualification.

(Name) SEE SUPPORTING ACTIVITY(IES) LISTED IN THE SPECIFICATION(S)
(Address)

(c) If an offeror, manufacturer, source, product or service covered by a qualification requirement has already met the standards specified, the relevant information noted below should be provided.

Offeror's Name _____
 Manufacturer's Name _____
 Source's Name _____
 Item Name _____
 Service _____
 Identification_____ Test Number_____ (to the extent known)

(d) Even though a product or service subject to a qualification requirement is not itself an end item under this contract, the product, manufacturer, or source must nevertheless be qualified at the time of award of this contract. This is necessary whether the Contractor or a subcontractor will ultimately provide the product or service in question. If, after award, the Contracting Officer discovers that an applicable qualification requirement was not in fact met at the time of award, the Contracting Officer may either terminate this contract for default or allow performance to continue if adequate consideration is offered and the action is determined to be otherwise in the Government's best interests.

(e) If an offeror, manufacturer, source product or service has met the qualification requirement but is not yet on a qualified products list, qualified manufacturers list, or qualified bidders list, the offeror must submit evidence of qualification prior to award of this contract. Unless determined to be in the Government's interest, award of this contract shall not be delayed to permit an offeror to submit evidence of qualification.

(f) Any change in location or ownership of the plant where a previously qualified product or service was manufactured or performed requires reevaluation of the qualification. Similarly, any change in location or ownership of a previously qualified manufacturer or source requires reevaluation of the qualification. The reevaluation must be accomplished before the date of award.

[End of Clause]

13	52.204-4006 (TACOM)	INCORPORATION OF TACOM MASTER SOLICITATION FOR SIMPLIFIED ACQUISITIONS AND DESIGNATION OF F.O.B. POINT	MAY/2000
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(a) This Request for Quotation (RFQ) or Purchase Order (PO) incorporates by reference TACOM-Warren's Master Solicitation for

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Name of Offeror or Contractor: MACOMB SHEET METAL, INC.

Simplified Acquisitions with the same force and effect as though the clauses and provisions it contains were physically incorporated into this document. The version in effect at time of award is the version that applies to your purchase order.

(b) The TACOM-Warren Master Solicitation for Simplified Acquisitions is available on our Electronic Contracting web page, which you can reach using the following URL address: <http://contracting.tacom.army.mil/opportunity.htm>

(c) The clauses and provisions in Section I of the Master Solicitation apply to all TACOM-Warren RFQs and Purchase Orders that contain this clause. The clauses contained in Section II of the Master Solicitation applies in addition to those in Section I when the RFQ or PO specifies F.O.B. Origin.

(d) We hereby specify that the required F.O.B. point for this acquisition is Destination.

(e) We will keep the Master Solicitation identified in this clause available on our Electronic Contracting web page during the entire period of performance of the purchase order. If the current Master Solicitation later is revised to incorporate a change in any of the clauses, the version specified in this clause will be retained, intact, in an archive area on our web page for continued reference and use.

[End of Clause]

14	52.211-4015 (TACOM)	CONFIGURATION CONTROL--ENGINEERING CHANGES	JUL/2002
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(a) DEFINITIONS:

(1) Engineering Change Proposal (ECP). An ECP is a suggestion that we (the Government) permanently change some requirement of the Technical Data Package (TDP). ECPs can be issued before or during contract performance. NOTE: The current Government Standard allows us ninety days to process routine ECPs. If you (the contractor) need a response in less than ninety days to meet contract requirements, you should consider submitting a deviation along with your ECP.

(2) Request for Deviation (RFD). A RFD is a one-time request to deviate from TDP requirements. You must submit your deviation request before you deviate from the TDP requirements. You can request a deviation for a specific number of parts or the entire contract quantity.

(3) Value Engineering Change Proposal (VECP). A proposal that --

(i) Requires a change to the instant contract; and

(ii) Results in reducing the overall projected cost to the agency without impairing essential functions or characteristics; provided, that it does not involve a change --

(A) In deliverable end item quantities only;

(B) In research and development (R&D) end items or R&D test quantities that is due solely to results of previous testing under this contract; or

(C) To the contract type only.

(4) Notice of Revision (NOR). A NOR describes the proposed changes to a technical document being requested by an ECP.

(b) When will TACOM start processing change requests? TACOM won't start processing any ECP, VECP, or RFD until we receive the ACO's comments (see paragraph (e) below) and the ECP, VECP, or RFD documentation.

(c) Contractor Responsibility. ECPs, VECs, and RFD shall contain information per the instructions outlined on the Data Delivery Descriptions (DDD) which can be found at the following website: <http://contracting.tacom.army.mil/enr/enrchange.htm>. Forms for preparing an ECP, VECP, or a RFD can also be found at this website. You may use other media, as long as you give us all the information outlined in the DDDs.

(1) Identify the two-digit Weapon System Code (WSC) on your submittal. The WSC for this procurement is NQ.

(2) The Contractor shall submit ECPs/VECPs/RFDs to the Government electronically. You must use one of the following electronic mediums: 100 megabyte Zip*-disk, 3 1/2 inch disk, 650 megabyte CD ROM, or E-mail. (E-mail files must be sized 3.5 mb or less.) Identify the software application, and version, that you used to create each file submitted.

(3) ECPs/VECPs/RFDs submitted in paper form are unacceptable and will be returned. You must use one of the following

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electronic formats:

- (i) Files readable using these Microsoft 97 Office Products: Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print image is not acceptable.
 - (ii) Files in Adobe PDF (Portable Document Format).
 - (iii) Files in HTML (Hypertext Markup Language). HTML documents must not contain active links to live Internet sites or pages. All linked information must be contained within your electronic ECPs/VECPs/RFDs and be accessible offline.
 - (iv) Other electronic formats. Before preparing your ECPs, VECPS or RFDs in any other electronic format, please e-mail the engineer, copy-furnished to the buyer and ACO, to obtain a decision as to the format's acceptability. Failure to e-mail the engineer to seek an alternate format's acceptability may result in rejection of your submission. All alternate methods must be at no cost to the Government. NOTE: The above formats may be submitted in compressed form using self-extracting files.
- (d) Submittal Procedures for ECPs/VECPs/RFDs.
- (1) Send one copy of the ECP, VECP or RFD in electronic format to your ACO.
 - (2) Send one copy of the ECP, VECP or RFD in electronic format to the buyer listed on the solicitation/ contract document.
- WARNING - Submit complete, legible, virus free packages per paragraphs 1 and 2 above, or we may return your ECP/VECP/RFD without processing them.
- (e) ACO Responsibility. Within ten working days from the day you receive the contractor's request, the ACO must prepare Comments on the ECP, VECP, or RFD in electronic format, and forward it as follows:
- ECPs, VECPS, and RFDs. Email a copy of the contractor's request and ACO comments (DD Form 1998) to the engineer Mr. Jeffrey Ruehs, email address: ruehsj@tacom.army.mil and the buyer identified in block 7 of the solicitation cover sheet (SF 33), block 5 on the Standard Form 26, or block 6 on the DD Form 1155.
- (f) Approval of ECPs, VECPS and RFDs.
- (1) ECPs should be used to make permanent changes in the Government Technical Data Package (TDP). Contractual relief should be requested using a Request for Deviation. This is because the Government requires more time to analyze any proposal to permanently change the specification or TDP. Cost saving improvements to the TDP should be submitted as a VECP, if a VE clause is contained in the contract.
 - (2) ECPs. TACOM will review and make a decision within the ninety day timeframe. Notification of our decision will be made by the contracting officer or representative.
 - (3) RFDs. Decision on RFDs will be made within 30 days from the date we receive them from the ACO.
- (g) Processing Emergency and Urgent ECPs. Ordinarily, ECPs submitted by the contractor will be deemed routine. If you submit an ECP that you consider to be an emergency or urgent (as defined in paragraph 11 of DDD for ECPs), you must immediately notify the PCO. TACOM will review the criticality of the ECP, and, if we determine that it is urgent or critical, we'll follow the appropriate processing time-frames as outlined in paragraph 11 of the DDD for ECPs.
- (h) Reminder - Only the PCO can change the Contract. NO OTHER GOVERNMENT REPRESENTATIVE is authorized to make a commitment for, or bind the Government.
- (i) RFDs shall contain sufficient pricing data to determine if a downward equitable adjustment to the contract is required.
- (j) Questions.
- (1) Questions about preparation and submittal of change request should be directed to the Government Quality Assurance Representative (QAR).
 - (2) Questions about the status of change requests you've already submitted, contact the buyer. You can find the buyer's name, number and e-mail address in block 7 of the solicitation cover sheet (SF 33), block 5 on the Standard Form 26, or block 6 on the DD Form 1155.

[End of Clause]

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Name of Offeror or Contractor: MACOMB SHEET METAL, INC.

15	52.211-4053 (TACOM)	REQUIRED TAILORING LANGUAGE TO ELIMINATE CLASS I OZONE-DEPLETING SUBSTANCES	MAR/2000
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(a) The purchase description or Technical Data Package (TDP) for this purchase order incorporates one or more specifications or standards that, in their unmodified form, either authorize or require the use of Class I Ozone-Depleting Substances (CIODS). For purposes of your performance on this purchase order, those specifications (which are identified in paragraph (b) of this clause) are modified by special tailoring language which appears in the TACOM Acquisition Center's web-site. Directions for reaching our web-site and locating the required tailoring language appear in paragraph (c) of this clause.

(b) Tailoring language to eliminate the authorization or requirement to use Class I Ozone-Depleting Substances (CIODS) is hereby incorporated into this contract by reference. Packaging Specifications MIL-L-61002 and MIL-STD-129, where they apply, are affected by this tailoring language. Other specifications and standards affected are: MIL-C-53072.

(c) The CIODS listing that contains the required tailoring language is on the TACOM Acquisition Center web-site, which you can reach by using this URL: <http://contracting.tacom.army.mil/ciods.html>

[End of Clause]

16	52.217-4001 (TACOM)	SEPARATELY PRICED OPTION FOR INCREASED QUANTITY	APR/1997
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(a) The Government hereby reserves the right to increase the quantity of the contract item up to an additional quantity of 28 units. The unit price for such option quantity shall be as set forth in CLIN 0002AA. This option may be exercised by the Government at any time, but in any event not later than 365 days after award. In addition, such option may be exercised in increments, subject to the stated total additional quantity limitations, price(s), and the above-stated time for exercise of the option.

(b) Delivery of the items added by the exercise of this option shall continue immediately after, and at the same rate as, delivery of like items called for under this contract, unless the parties hereto otherwise agree.

(c) Additionally, prior to the expiration of the original option period identified in paragraph (a) above, the Government may seek a bilateral extension of the option period for an additional period not to exceed 90 days from the expiration date of the original option period.

[End of Clause]

17	52.242-4008 (TACOM)	ROUTING OF SPECIAL PROCESS APPROVALS	AUG/1994
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(a) Specification TT-C-490, which is part of the technical data package for this contract, may require you to get approval from us prior to production for one or more special processes involved in producing this item. You are required to get prior approval unless the specification says otherwise.

(b) You will prepare the written procedures as the specification requires. You will then route the procedure through the Administrative Contracting Officer (ACO) for review and comment. Once you get the procedure back from the ACO, you will then forward it to the Procuring Contracting Officer (PCO) at TACOM for final approval. The correct address for the PCO is on the face page of this contract.

(c) You will cite (i) the contract number and (ii) the governing specification or standard on all procedures you submit for approval.

[End of Clause]

18	52.246-4005 (TACOM)	INSPECTION AND ACCEPTANCE POINTS: ORIGIN	FEB/1995
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(a) Inspection and acceptance of supplies offered under this purchase order shall take place as specified herein. Inspection: ORIGIN Acceptance: ORIGIN

(b) Origin inspection shall take place at the site specified below:

For Product: Macomb Sheet Metal, Inc.
35195 Forton Court
Clinton Township, MI 48035

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For Packaging: Grigg Box (CAGE Code 2E424)
19000 Fitzpatrick
Detroit, MI 48228

[End of Clause]

19 52.246-4053 USE OF MIL-STD 1916 JAN/2001
(TACOM)

The Government will not accept lots whose samples submitted for acceptance contain nonconformances unless appropriately documented and approved by the contracting officer. The contractor shall use MIL-STD- 1916, DOD Preferred Methods of Acceptance of Product. The Verification Level (VL) shall be VL IV for major characteristics and VL II for minor characteristics. MIL-HDBK-1916 provides guidance on the use of MIL-STD 1916. This handbook is not contractually binding.

[End of Clause]

20 52.247-48 F.O.B. DESTINATION--EVIDENCE OF SHIPMENT (DEVIATION) JUL/1995

(a) If this contract is awarded on an f. o. b. destination basis, and if transportation is accomplished by common carrier, parcel post, or other than common carrier, the Contractor agrees not to invoice until the supplies are shipped, and to retain the following evidence of shipment (EOS) documentation for a period of 4 years after completion of the contract.

(1) If transportation is accomplished by common carrier, the Contractor will retain a signed copy of the commercial bill of lading of the supplies covered by the invoice, indicating the carrier's intent to ship said supplies to the destination specified in the contract.

(2) If transportation is accomplished by parcel post, the Contractor will retain a copy of the mailing certificate, or

(3) If transportation is by other than common carrier or parcel post, the Contractor will retain the receipt copy of the appropriate delivery document showing receipt at the destination in the contract.

(b) Retention of the above EOS documentation and having the documentation available for subsequent review, if needed, eliminates the requirement to provide these documents with the Contractor's paper, or electronically transmitted, invoices.

[End of Clause]

21 252.247-7023 TRANSPORTATION OF SUPPLIES BY SEA (Alternate III dated May 2002) MAY/2002

(a) Definitions. As used in this clause--

(1) Components means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.

(2) Department of Defense (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.

(3) Foreign flag vessel means any vessel that is not a U.S.-flag vessel.

(4) Ocean transportation means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

(5) Subcontractor means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract. However, effective May 1, 1996, the term does not include a supplier, materialman, distributor, or vendor of commercial items or commercial components.

(6) Supplies means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) Supplies includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and

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vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.

(7) U.S.-flag vessel means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.

(2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if-

(i) This contract is a construction contract; or

(ii) The supplies being transported are-

(A) Noncommercial items; or

(B) Commercial items that-

(1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that--

(1) U.S.-flag vessels are not available for timely shipment;

(2) The freight charges are inordinately excessive or unreasonable; or

(3) Freight charges are higher than charges to private persons for transportation of like goods.

(d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum--

(1) Type, weight, and cube of cargo;

(2) Required shipping date;

(3) Special handling and discharge requirements;

(4) Loading and discharge points;

(5) Name of shipper and consignee;

(6) Prime contract number; and

(7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

(e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information--

(1) Prime contract number;

(2) Name of vessel;

(3) Vessel flag of registry;

(4) Date of loading;

(5) Port of loading;

(6) Port of final discharge;

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(7) Description of commodity;

(8) Gross weight in pounds and cubic feet if available;

(9) Total ocean freight in U.S. dollars; and

(10) Name of the steamship company.

(f) The Contractor shall insert the substance of this clause, including this paragraph (f) in subcontracts that are for a type of supplies described in paragraph (b)(2) of this clause.

[End of Clause]

22 52.204-4005 REQUIRED USE OF ELECTRONIC CONTRACTING DEC/2002
(TACOM)

(a) All contract awards, modifications and delivery orders issued by TACOM will be issued electronically. The contractor has the option to receive these actions either via the Worldwide Web (WWW) or Electronic Data Interchange (EDI). Many provisions/clauses that appear "by reference", meaning only clause titles and regulation site are listed; their full texts can be found at the website <http://farsite.hill.af.mil/>

(b) In order to be eligible to receive an award under this solicitation, the successful offeror must be registered with the Department of Defense (DOD) Central Contractor Registration (CCR). The CCR registration process may be done electronically at the World Wide Web (WWW) site: <http://www.ccr.gov/> . (In order to be registered to use EDI, you must use the long form for registration. Certification information, including information on the EDI 838 TPP, must be furnished to the Contracting Officer within 60 calendar days after contract award to complete networking requirements within the Government.)

(c) Worldwide Web Distribution. The contractor will receive an electronic Notice of the Award, Modification, or Delivery Order via e-mail. If you choose the WWW option, you must download the file from the appropriate TACOM webpage:

Warren: http://contracting.tacom.army.mil/awards_official.htm
Rock Island: <http://aaais.ria.army.mil/AAIS/AWDINFO/index.htm>
Picatinny: <http://procnet.pica.army.mil/Contracts/Index.htm>
Red River Army Depot: <http://www.redriver.army.mil/contracting/Awards>
Anniston Army Depot: <http://www.anadprocnet.army.mil>

(d) Electronic Data Interchange. If you choose to receive contract awards, modifications and delivery orders through EDI, they will be delivered electronically via the Federal Acquisition Network (FACNET). Federal Standard Version 3050 of Standard X12 from the American National Standards Institute (ANSI) will be used as the format for these electronic transactions.

(1) You must complete the EDI 838 Trading Partner Profile, and must agree (i) to subcontract with a DoD certified VAN or Value Added Service (VAS) provider, or (ii) to become DoD certified as a Value Added Network (VAN). The EDI 838 Training Partner Profile is contained in the basic CCR registration form and includes portions of the registration form which are titled "Optional".

(2) You must select a VAN from the official DoD approved list. DoD Certified VANs are listed at <http://www.acq.osd.mil/ec/ecip/index.htm> . If your VAN is later removed from the official list, or if you voluntarily drop your initially selected VAN, then you must switch to a VAN that remains on the official DoD approved list. You must maintain an active account on a DoD approved VAN for the entire duration of the contract, beginning no later than the 60th day after award.

(e) Unless otherwise specified elsewhere in the contract, all data items you are required to provide under this contract must be submitted electronically. Acceptable formats include:

(1) Microsoft* 97 Office Products (TACOM can currently read OFFICE 97* and lower.): Word, Excel, Powerpoint, or Access

(2) 100 OR 250 MEGABYTE ZIP*-DISK, 3 1/2 INCH DISK, OR 650 MEGABYTE CD ROM

(3) E-MAIL (Maximum size of each e-mail message is be three and one-half (3.5) megabytes).

(4) Other electronic formats. Before submitting your data in any other electronic format, please e-mail the buyer identified on the face of the contract, with e-mail copy-furnished to amsta-idg@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by the buyer not later than ten calendar days before the required data submission date.

NOTE: The above formats may be submitted in compressed form using self-extracting files.

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(f) Additional information can be obtained by sending a message to: acqcenweb@tacom.army.mil or by calling (586) 574-7059.

[End of Clause]

23 52.204-4009 MANDATORY USE OF CONTRACTOR TO GOVERNMENT ELECTRONIC COMMUNICATION JUN/1999
(TACOM)

(a) All references in the contract to the submission of written documentation shall mean electronic submission. All electronic submissions shall be in the formats and media described in the "Electronic Quotations/Offers/Bids Required in Response to this Request for Quotations/Proposals/Bids" clause elsewhere in this document. (See Section K for commercial acquisitions, Section L for RFPs, and Section I for RFQs.)

(b) This shall include all written unclassified communications between the Government and the Contractor except contract awards and contract modifications which shall be posted on the internet. Return receipt shall be used if a commercial application is available. Classified information shall be handled in full accordance with the appropriate security requirements.

(c) In order to be contractually binding, all Government communications requiring a Contracting Officer signature must be sent from the Contracting Officer's e-mail address. The Contractor shall designate the personnel with signature authority who can contractually bind the contractor. All binding contractor communication shall be sent from this contractor e-mail address(es).

(d) Upon award, the Contractor shall provide the Contracting Officer with a list of e-mail addresses for all administrative and technical personnel assigned to this contract.

(e) Unless exempted by the Procuring Contracting Officer in writing, all unclassified written communication after contract award shall be transmitted electronically.

[End of Clause]

24 52.211-4008 DRAWING LIMITATIONS NOV/2002
(TACOM)

(a) The drawings supplied with this contract are not shop or process drawings. They are engineering design drawings. They are adequate to permit manufacture, and:

- (1) depict the completed (item(s), and
- (2) serve as the basis for inspection of the completed item(s).

(b) These drawings DON'T cover intermediate drawings/specifications or steps in the manufacturing process. As a result, even if you meet all the dimensions and tolerances specified in the engineering design drawing for each individual part, a cumulative unacceptable fit for the contract item could result.

(c) YOU ARE RESPONSIBLE for producing the shop or process drawings needed to cover intermediate steps in the manufacturing process.

(d) The Contractor agrees that he has obtained all specifications and drawings necessary to manufacture the items being solicited in accordance with the TDP including all incorporated specifications and drawings. The contractor is responsible for having all drawings and specifications. Delivery delays are not excusable where the contractor asserts that it did not have a specification or drawing and has failed to request, in writing, the specification from either the Contracting Officer or Contract Specialist prior to the solicitation closing date.

(e) If you fail to produce an end item with a cumulative fit that conforms to Government drawings, specifications or other supplemental manufacturing documentation, you'll be responsible for correcting this condition at no additional cost to the Government and no delivery schedule extension.

[End of Clause]

25 52.211-4016 TT-C-490, TYPE I, ZINC PHOSPHATE PRETREATMENT SYSTEMS FOR CARC OCT/2002
(TACOM)

(a) If the technical data package requires the use of a TT-C-490, Type I, pretreatment system, the process including primer

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application must be approved by the procuring activity prior to use. All approved facilities have been provided a letter of system approval which identifies the specific phosphate chemical system and the limitations/exceptions authorized. These approval letters must be dated no later than January 1989. Letters of approval which do not identify the chemical system are limited to approval on a specific contract only and do not have carte blanc approval. Approvals are substrate specific. The default qualification is low carbon steel. Heat treated, low alloy steel and galvanized steels require special qualification.

(b) Any zinc phosphate application facility requesting approval must submit the procedure to TACOM, ATTN: AMSTA-TR-E/267 for review at least 35 days before planned start-up. The procedure must identify the prime contractor and the contract number. The procedure must contain all the elements required per paragraph 3.2 of TT-C-490. A qualification audit will be arranged with the facility. The facility must demonstrate its ability to perform all required process control tests and operate successfully within its designated operating parameters.

(c) If the contractor cannot find a capable facility within his area, a list of TACOM approved facilities is available at <http://contracting.tacom.army.mil/engr/eng.htm> . These facilities are capable of meeting the performance requirements in the specification.

(d) For all TT-C-490, Type I facilities, the sentence "Sampling may then be reduced to one sample twice per week" in paragraph 4.2.8 of TT-C-490 is deleted and replaced with the following " Sampling for production control is required with the testing of two phosphated and primed specimens per month for each solvent-borne primer used and two specimens every two months for electrocoat primers".

[End of Clause]

26 52.211-4017 ENHANCED CARC REQUIREMENTS FOR HIGH PERFORMANCE SYSTEMS JUN/2002
(a) THE FOLLOWING REQUIREMENTS SUPERSEDE THE PERFORMANCE REQUIREMENTS CONTAINED IN TT-C-490, MIL-C-5541 AND MIL-C-53072 RELATIVE TO THE ADHESION AND CORROSION RESISTANCE OF THE CARC SYSTEM:

(b) Ferrous and galvanized surfaces shall be cleaned and pretreated to provide the following level of performance on a repeatable basis. The cleaning/pretreatment/control process shall be documented and submitted to the procuring activity for approval prior to production. Qualification and process control testing shall be performed on the same substrate used in production. The system under test shall consist of the pretreatment and primer. There are significant variations in performance due to primer manufacturer, VOC content and primer thickness variation. Sufficient testing shall be conducted to achieve a statistical confidence in both the brand/type of primer used and the dry film thickness used in production. If the tolerance of the dry film thickness exceeds plus or minus 1.0 mil then you must qualify the extremes of the range separately.

(c) To verify the corrosion resistance, a minimum of three test panels per test variation no smaller than 4 x 12 inches with the pretreatment/primer system as noted above shall be subjected to 1000 hr. of neutral salt spray per ASTM B117 (40 cycles of GM 9540P - scribed is the preferred alternative) for ferrous substrates or 40 cycles of GM 9540P for galvanized surfaces. The test panels shall be cured for a minimum of 7 days and vertically scribed through the coating system to the metallic layer. A minimum of 24 hr. after the completion of the neutral salt spray test or within 5 days after completion of the GM 9540P test the scribe shall be scraped at a 30 degree (approximate) contact angle with a 38mm (approximate) blunt tipped metal blade such as a putty knife parallel and perpendicular to the scribe. There shall be no more than 3mm maximum loss of paint adhesion or corrosion at any point from the scribe line. In addition, there shall be no more than 5 blisters in the field with none exceeding 1mm; corrosion in the field shall not exceed Rust Grade 9 of ASTM D610. The minimum primer dry film thickness noted on the test panels which passes the corrosion resistance test shall be the minimum requirement for production painted hardware.

(d) To verify long term CARC adhesion, after completion of the corrosion resistance test evaluation each test panel will be subjected to cross hatch tape test (minimum tape adhesion rating of 45 oz. per inch of width). The test pattern shall be 4 x 4 scribe lines to the metallic layer at 2mm intervals(approximate) and shall be done no closer than 12 mm from any edge or the scribe creep. Multiple head cutters are not recommended. Loss of two or more complete primer squares shall constitute failure.

(e) The contractor must demonstrate the ability to pass both tests for the system to be considered acceptable. This testing shall be performed on 5 consecutive days of production. If all test panels are acceptable, the testing can revert to two test panels every two months of production.

(f) The only system that is currently available to achieve this level of performance is a zinc phosphate pretreatment system per TT-C-490 with a high quality primer. All primers used must be on the QPL for MIL-P-23377, 53022, -53030, or 53084. Not all QPL primers with the exception of electrocoat primers per MIL-C-53084 have this level of corrosion resistance/paint adhesion, however. New high performance, "Combat Grade" Powder Coat Primers will also meet this performance requirement. These primers can only be applied by approved applicators. The Specification controlling both the primers and their application are available upon request from AMSTA-TR-E/MEPS, (586) 574-5083.

Note: Hot dipped galvanized surfaces are highly prone to chlorine/chloride contamination from the galvanizing flux process. This contaminant must be removed for the coating system to pass these performance tests.

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(g) For aluminum substrates the required pretreatment system is a chromate conversion per MIL-C-5541. If alternative pretreatment systems wish to be considered, they must demonstrate their ability to pass when coated with the nominal production primer (scribed) 120 cycles of GM 9540P. After completion of the test, the panels shall be scraped as noted above and shall have no more than 0.5mm of paint loss maximum from the scribe. In addition, there shall be no more than 5 blisters in the field with none larger than 1mm. After completion of the 120 cycle test, the cross hatch scribe test noted above shall be performed. The removal of one or more complete squares of primer shall constitute failure. The alternate system must demonstrate its ability to provide an acceptable product on 5 consecutive days of production to be considered a suitable alternative. The alternative process must be documented and approved by the procuring activity. Controls must be established to assure that the process remains under statistical control. The only alternative products which have demonstrated their ability to meet these requirements for 5000 and 6000 series aluminum alloys are Alodine 5200 and Alodine 5700.

(h) Failure to meet the corrosion resistance/adhesion requirements shall be cause for rejection of all production units manufactured during that production interval.

(i) Final Acceptance of the CARC Finish on Production Hardware:
The dry film thicknesses of the primer and topcoat as well as coating adhesion on the fully cured primer/topcoat coating system are mandatory requirements. Variations in the primer thickness and curing conditions will dramatically affect recoat windows and coating performance for some primers. Manufacturing processes which are unable to control the dry film thickness to the requirements contained in Table V of MIL-C-53072 shall be subjected to the 4 x 4 cross hatch scribe test noted above on two production units per lot with two tests per unit. One test shall be conducted on a vertical and one on a horizontal surface (relative to the painting process). There shall be a maximum removal of one complete square of primer/topcoat or topcoat only. The polyurethane CARC topcoat requires approximately 24 days to completely cure at 68 Degrees F. To accelerate the curing for purposes of product acceptance, the following procedure may be followed: Cure at 190-210 degrees F for three hours (this is time at temperature and is, therefore, material thickness dependent) once the topcoat has reached a dry-to-touch condition. This is to be followed by 7 days at 65 degrees F minimum. Adhesion testing shall be performed only on a completely cured CARC finish. Contractors which have performed a thorough design of experiments methodology to evaluate the impact of paint system variables or have processes which meet Table V requirements can perform the final acceptance adhesion test on representative test coupons.

[End of Clause]

27	52.211-4021 (TACOM)	WELDING SYMBOLS - CLARIFICATION OF GROOVE WELDING SYMBOL	APR/1995
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You must interpret welding symbols in accordance with AWS A2.4, except in the case of groove welds. In the case of groove welds, if the drawing doesn't specify an effective throat and/or weld size, interpret the dimension to the left of the groove welding symbol to mean both depth of preparation and effective throat/weld size.

[End of Clause]

28	52.211-4030 (TACOM)	SPECIAL TESTING REQUIREMENTS FOR CHEMICAL AGENT RESISTANT COATINGS (CARC) ON METALLIC SURFACES	MAR/2001
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(a) Application: MIL-C-46168
MIL-C-53039
MIL-PRF-22750

(b) End-Item Paint Inspection: After the complete paint finish has been applied and cured* (See *Note, below), the Contractor shall test and inspect two units per lot for (i) workmanship, (ii) total paint film thickness, and (iii) paint adhesion. Unless otherwise agreed to between the Contractor and the cognizant Government quality assurance representative, a lot shall be defined as all units submitted for final Government acceptance at one time. The use of test panels in lieu of actual production units is prohibited. At final inspection, the cumulative total paint film thickness of pretreatment, primer, and topcoat shall at a minimum conform to the sum of the minimum thicknesses for individual elements of the paint finish as specified in the Film Thickness Table below. Sufficient locations shall be spot-checked to ensure proper workmanship and paint thickness uniformity. The size and configuration of the unit as well as the number of vendors responsible for the paint finish of component parts shall be taken into consideration in determining the number of locations to be checked. The specific number of test locations shall be agreed to by the cognizant Government quality assurance representative in advance. In addition, two locations on each sample unit shall be selected to conduct the scribe tape test. The test locations shall be routinely varied among the following:

- (1) Directly adjacent to a weld
- (2) On or directly adjacent to a machine cut or sheared edge.
- (3) On any mechanically formed surface when lubricants/drawing compounds were used.
- (4) On paint touch-up areas.

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(c) The precise location for each scribe tape test shall be in an inconspicuous location that has been accepted by the cognizant Government quality assurance representative before the test is conducted.

(d) Upon completion of the scribe tape test, the scribe marks shall be feathered into the adjacent area and touched up with the required top coat so that the tested area again conforms to the applicable minimum specified in the Film Thickness Table below.

*Note: The complete paint finish is defined as the pretreatment, primer, and topcoat applied to the substrate. Curing of the complete paint finish is dependent upon temperature, humidity, and paint film thickness. The time necessary to achieve sufficient adhesion to pass the scribe tape test must be determined by each facility. For purposes of this test, curing at ambient temperature will take from 24 days.

- (e) Test Methods:
- (1) Film Thickness. Film thickness shall be verified with a nondestructive film gage. The gage shall be suitable for measurements over the applicable substrate material and shall have sufficient accuracy to ensure compliance to the thickness limitations. The gage shall be capable of being calibrated. If no other calibration specification or requirement is identified elsewhere in this contract, then the gage shall be calibrated in accordance with ISO 10012.
- (2) Scribe Tape Test. The following test procedure shall be followed. The test surface shall be sufficiently warm and dry to ensure adhesion of the tape. All dimensions cited in this Scribe Tape Test description are approximate:
- (i) Scribe four one-inch lines completely through the paint finish to the substrate, one sixteenth to three thirty-seconds of an inch apart.
- (ii) Scribe four additional one-inch lines, completely through the paint finish, one sixteenth to three thirty-seconds of an inch apart, rotated 90 degrees with respect to the first set of lines. The resulting pattern shall contain nine squares.
- (iii) Press a length of A-A-1830, A-A-884, or any commercially available tape with a minimum adhesion rating of 45 oz. per inch of width firmly over the scribed pattern, rubbing out all air pockets.
- (iv) Wait 10 seconds, minimum. Grasp a free end of the tape and at a rapid speed strip it from the paint surface by pulling the tape back upon itself at 180 degrees.
- (f) Interpretation of Test Results

NOTE: These two tests are not a substitute for corrosion tests such as neutral salt spray or accelerated corrosion tests which verify coating durability.

(1) Film Thickness. All applicable surfaces shall have complete paint coverage. A minimum of 75% of the applicable surfaces of each test unit shall meet the minimum, cumulative dry film thickness requirements. Failure of either test unit shall result in rejection of the production lot that it represents.

FILM THICKNESS TABLE

<u>SPECIFICATION</u>	<u>DRY FILM THICKNESS (Mils)</u>
DOD-P-15328*	0.3 - 0.5
MIL-PRF-23377	1.0 - 1.5
MIL-P-53022	1.0 - 1.5
MIL-PRF-22750	1.3 - 1.7
MIL-P-53030	1.0 - 1.5
MIL-C-46168	1.8 - 3.2
MIL-C-53039	1.8 - 3.2

*May not be allowed per contract due to VOC and hexavalent chromium content.

(2) Scribe Tape Test (Adhesion). The removal of two or more complete squares of top coat, or top coat-primer-pretreatment coating, from either test unit constitutes test failure and the production lot from which it comes is rejected. Removal of overspray

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does not constitute test failure.

Notice: The scribe tape test is designed to detect any deficiency in the paint application process that would affect the durability of the CARC finish. Typical causes of failure are:

- (i) Inadequate cleaning of the substrate.
- (ii) Contamination of the surface between coatings.
- (iii) Excessive paint film thickness in a single coating application.
- (iv) Application of a coating over a previous coating which has not been adequately cured.

It is strongly recommended that the Contractor implement rigid in-process controls in conjunction with the best industrial painting practices to ensure that the performance requirements specified in this clause are met.

[End of Clause]

29	52.211-4036	FORMAT OF THE TECHNICAL DATA PACKAGE	APR/2000
	(TACOM)		

(a) The TDP for the contract item is available only in electronic format via the TACOM Contracting Webpage (contracting.tacom.army.mil). TACOM-Warren has discontinued its practice of providing hard copies (i.e. CD ROM) of technical data packages (TDPs). You must obtain a copy of the TDP for this solicitation via the TACOM Contracting Webpage. For those TDPs not available via the webpage, the TDP will be issued free of charge in CD-ROM format. The CD-ROM includes the necessary software to access, view, and print individual images that are included in the TDP. The CD-ROM can be read in any personal computer that includes a CD-ROM drive. If your company does not have a personal computer with a CD-ROM drive, you can take the CD-ROM disk to any of various commercial computing or copying/printing service, to have hard copies produced.

(b) TDPs available via the TACOM Contracting Webpage may be purchased in CD ROM format for a fee of \$4.60 each. Requests for CD ROMs and payment should be mailed to:

USATACOM
AMSTA-CM-CDD (TDP Requests)
Warren, MI 48397-5000

Make checks payable to the United States Treasury. Points of Contact for this initiative: Gerri Mackey and Diane Woods at (586) 574-7061, and Gloria McCullough at (586) 574-7064.

[End of Provision]

30	52.211-4069	WELDING INSPECTION REQUIREMENTS	MAR/2001
	(TACOM)		

(a) INSPECTION: As the contractor, during performance of this contract you will verify weld quality and workmanship using qualified inspectors trained to perform these inspection functions. Acceptable qualification of your inspectors may be based on:

- (1) current or previous certification as an AWS Certified Welding Inspector; or
- (2) current or previous certification by the Canadian Welding Bureau (CWB); or
- (3) inspection performed by an engineer or technician who is competent in the use of weld inspection techniques and equipment, on the basis of (i) formal training or (ii) experience, or both, in metals fabrication, inspection, and testing.

(b) NON BALLISTIC VISUAL INSPECTION. You will perform all non-ballistic visual inspections of weld quality and workmanship for structural steel in accordance with Section 6 of AWS D1.1-96. For structural aluminum, you may perform non-ballistic visual inspections of weld quality and workmanship using the guidelines given in MIL-STD-370A, dated 21 Sep 93.

(c) BALLISTIC VISUAL INSPECTION. You will perform all ballistic visual inspections in accordance with section 6 of the UDLF/TACOM Ground Combat Vehicle Code--Aluminum, dated July 1996. Copies of this document can be obtained by written request to:

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Name of Offeror or Contractor: MACOMB SHEET METAL, INC.

Commander, US Army Tank-automotive and Armaments Command
ATTN: AMSTA-TR-E/Materials
Warren, MI 48397-5000

[End of Clause]

31 52.213-4010 ADDITIONAL GENERAL CLAUSES FEB/1997
(TACOM)

The following three FAR clauses apply to this purchase order, in addition to the other clauses contained in, or cited in, the document:

(1) CHANGES-FIXED-PRICE (AUG 1987)
52.243-1

(i) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

(A) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for the Government in accordance with the drawings, designs, or specifications.

(B) Method of shipment or packing.

(C) Place of delivery.

(ii) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(iii) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(iv) If the Contractor's proposal includes the cost of property made, obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(v) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

[End of Clause]

(2) TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (APR 1984)
52.249-1

The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the rights, duties, and obligations of the parties, including compensation to the Contractor, shall be in accordance with Part 49 of the Federal Acquisition Regulation in effect on the date of this contract.

[End of Clause]

(3) DEFAULT--FIXED-PRICE SUPPLY AND SERVICE (APR 1984)
52.249-8

The Contracting Officer, by written notice, may terminate this contract, in whole or in part, for failure of the Contractor to perform any of the provisions hereof. See referenced FAR cite for full provision.

[End of Clause]

32 52.215-4404 DATA AND COMMUNICATIONS SUBMITTED TO THE GOVERNMENT ELECTRONICALLY MAY/2002
(TACOM)

<p style="text-align: center;">CONTINUATION SHEET</p>	<p style="text-align: center;">Reference No. of Document Being Continued</p> <p style="text-align: center;">PIIN/SIIN W56HZV-04-P-0296 MOD/AMD</p>	<p style="text-align: center;">Page 22 of 24</p>
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Name of Offeror or Contractor: MACOMB SHEET METAL, INC.

(a) The Government often employs contractors as system administrators to operate and maintain Government computer systems. These systems include local area networks, web sites, databases, other electronic records, e-mail accounts, other electronic data transfer mechanisms and computer software. The employees of these contracted system administrators sign nondisclosure agreements obligating them not to reveal information contained in files, documents, computers or systems that they administer. However, unless such information is protected in some way, contracted system administrators do have the ability to access such information.

(b) Potential contractors as well as any other parties are thus advised to take steps needed to prevent access by contracted system administrators to information submitted electronically to the Government. Absent such steps, it is assumed that contracted system administrators are permitted the capability to access the data. The access will be limited to that which is necessary for the contract system administrator to perform its duties for the Government. The access shall be subject to the condition that third party information is not to be revealed by the contracted system administrator.

[End of Clause]

33 52.246-4019 VISUAL INSPECTION CRITERIA FOR STEEL WELDMENTS MAR/2001
(TACOM)

(a) Application: MIL-STD-1261

(b) Scope:

(1) These criteria supplement paragraph 4.3 of MIL-STD-1261 and supersede paragraph 6.3.1.5 of MIL-W-46086 and paragraph 5.9.1.5 of MIL-STD-1941. AWS A3.0 shall be used to define all other welding terms not defined herein.

(2) The limits established below represent the maximum discontinuities allowable for visual inspection of workmanship specimens and production steel weldments. (Note: Workmanship specimens which require cross-sectioning must also be evaluated for subsurface quality; these criteria are not contained herein.) Any discontinuity exceeding this limit is classified as defective and must be reworked or repaired dependent upon the nature and extent of the discontinuity. Weldments requiring subsurface weld inspection should be evaluated in accordance with the acceptance standard specified on the drawing in addition to these requirements.

(c) Discontinuities:

(1) Cracks - A weld crack is defined as a linear rupture resulting from excessive localized stress. Cracks can occur in the weld metal, fusion zone or heat affected zone. No cracks are allowed

(2) Porosity - Porosity is defined as a rounded cavity free of solid material resulting from gas entrapment during solidification.

(i) Maximum pore size shall be 1/16 inch.

(ii) There shall be no more than six pores for any twelve inch length of weld. For small weldments with continuous welds less than twelve inches in length, they shall have proportionately fewer pores allowed (example: three pores maximum for six inch length of weld).

(3) Overlap - Overlap is defined as a protrusion of weld metal beyond the bond at the toe of the weld.

(i) A radiused tie-in must exist with the parent metal.

(ii) The overlap condition must not exceed 10% of the total weld length.

(4) Slag Inclusion - Slag inclusion is defined as a non-metallic solid material entrapped in or on the weld metal or between the weld metal and base metal. This discontinuity is applicable to SMA and FCAW processes. No slag inclusions are allowed.

(5) Undercut - Undercut is defined as a groove melted into the base material adjacent to the toe of the weld and left unfilled by weld metal.

(i) For base materials .25 inch and less in thickness, no undercutting is permitted.

(ii) For base materials greater than .25 inch thickness:

(A) The maximum depth of undercut shall be 1/32 inch.

(B) The undercut must have a width not less than twice the depth.

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(C) The length of undercut shall not exceed two inches cumulative in any continuous 24 inch length of weld. For continuous welds less than 24 inches in length, the maximum cumulative length shall be in direct proportion to this limit or one inch, whichever is greater. (For example: for an eight inch continuous length of weld, maximum cumulative allowable undercut length is one inch).

(d) Weld Size:

(1) Fillet Welds:

(i) Fillet welds shall be measured using fillet weld gages.

(ii) For welds one-fourth inch and less, the weld size is the minimum as specified on the drawing symbol.

(iii) For fillet welds larger than one-fourth inch, the weld may be undersize by 1/16 inch for a maximum length of 10% of the continuous weld length.

(2) Groove Welds: No underfill is allowed.

[End of Clause]

34	52.246-4026	LOCAL ADDRESS FOR DD FORM 250	MAR/2002
	(TACOM)		

(a) The contractor must provide a copy of each Material Inspection and Receiving Report (DD 250) pertaining to this contract, to the addresses given below, using either of the following methods:

(1) Our first preference is for you to use electronic mail (e-mail), using the following e-mail address:

DD250@tacom.army.mil

(2) Our second preference is for you to use data facsimile (datafax) transmission, using this fax number:

(586) 574-7552 and use "DD250 mailbox" in the "to:" block of your fax cover or header sheet.

In either method, do not mix DD250s from more than one contract in a single transmission. That is, you may submit multiple DD250s in a single transmission, but they must all be against the same contract.

(b) These copies meet the requirements for the Purchasing Office copy and the Army Inventory Control Manager copy listed in tables 1 and 2 of DFARS Appendix F.

(c) The DD250 form may be found, in three different formats, on the World Wide Web at <http://webl.whs.osd.mil/icdhome/DD-0999.htm>

[End of Clause]

35	52.247-4016	HEAT TREATMENT AND MARKING OF WOOD PACKAGING MATERIALS	JUL/2002
	(TACOM)		

ALL NON-MANUFACTURED WOOD USED IN PACKAGING SHALL BE HEAT TREATED TO A CORE TEMPERATURE OF 56 DEGREES CELSIUS FOR A MINIMUM OF 30 MINUTES. THE BOX/PALLET MANUFACTURER AND THE MANUFACTURER OF WOOD USED AS INNER PACKAGING SHALL BE AFFILIATED WITH AN INSPECTION AGENCY ACCREDITED BY THE BOARD OF REVIEW OF THE AMERICAN LUMBER STANDARD COMMITTEE. THE BOX/PALLET MANUFACTURER AND THE MANUFACTURER OF WOOD USED AS INNER PACKAGING SHALL ENSURE TRACEABILITY TO THE ORIGINAL SOURCE OF HEAT TREATMENT. EACH BOX/PALLET SHALL BE MARKED TO SHOW THE CONFORMANCE TO THE INTERNATIONAL PLANT PROTECTION CONVENTION STANDARD. BOXES/PALLETS AND ANY WOOD USED AS INNER PACKAGING MADE OF NON-MANUFACTURED WOOD SHALL BE HEAT TREATED. THE QUALITY MARK SHALL BE PLACED ON BOTH ENDS OF THE OUTER PACKAGING, BETWEEN THE END CLEATS OR END BATTENS; ON TWO SIDES OF THE PALLET.

[End of Clause]

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LIST OF ATTACHMENTS

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Attachment 001	TDP ON THE WEB			